

Schriftenreihe der
Haushaltstechnik Bonn
Herausgeber: Prof. Dr. R. Stamminger

Ina Hook,
Angelika Schmitz,
Rainer Stamminger

**Dishwashing behaviour of
European consumers**

Ina Hook

Angelika Schmitz

Rainer Stamminger

Dishwashing behaviour of European consumers

Schriftenreihe der Haushaltstechnik Bonn

Band 2/2018

**Ina Hook,
Angelika Schmitz,
Rainer Stamminger**

Dishwashing behaviour of European consumers

Shaker Verlag
Aachen 2018

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.

Copyright Shaker Verlag 2018

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publishers.

Printed in Germany.

ISBN 978-3-8440-6019-5

ISSN 1863-320X

Shaker Verlag GmbH • P.O. BOX 101818 • D-52018 Aachen

Phone: 0049/2407/9596-0 • Telefax: 0049/2407/9596-9

Internet: www.shaker.de • e-mail: info@shaker.de

Content

1. Introduction	1
2. Methodology.....	3
3. Results for consumers with an automatic dishwasher.....	5
3.1. Socio-demographic characteristics	6
3.2. Purchase criteria.....	12
3.2.1. Six most important features taking into consideration when buying a new automatic dishwasher based on the priority in each country.....	13
3.2.2. Six most important features when buying a new automatic dishwasher and socio-demographic characteristics	16
3.2.3. Type and source of information supporting purchase decisions	18
3.3. Characteristics of the automatic dishwasher in the households	26
3.3.1. Age of automatic dishwasher	26
3.3.2. Size of automatic dishwasher.....	29
3.3.2.1. Satisfaction with the space in the automatic dishwasher.....	31
3.3.3. Satisfaction with the cleaning and drying performance of the automatic dishwasher.....	33
3.3.4. Delay start function.....	37
3.3.4.1. Usage of the delay start function	41
3.3.4.2. Remaining time in the delay start function before a programme begins.....	44
3.3.4.3. Reasons of not using the delay start function.....	46
3.4. Dishwashing behaviour of consumer with an automatic dishwasher	47
3.4.1. Pre-treating the dishware before placing it in the machine	47
3.4.2. Loading the automatic dishwasher	54
3.4.3. Water hardness in households with an automatic dishwasher	59
3.4.4. Dishwashing detergents	60
3.4.6. Detergent placement.....	67
3.4.8. Table ware items used per day	71
3.4.9. Dishwashing behaviour by hand.....	80
3.4.9.1. Ways of doing dishes by hand usually	84
3.4.9.2. Implements used for washing dishes by hand.....	86
3.4.9.3. Satisfaction with the cleaning performance when washing dishes by hand	86
3.4.10. Cleaning cycles in a dishwasher	87
3.4.11. Time of the day when the automatic dishwasher is normally running.....	92
3.4.12. Dishwashing programmes used	93
3.4.12.1. Dishwashing programmes used and socio-demographic characteristics	97
3.4.13. Use and reason for using short programmes	99
3.4.14. Use and reason for using high-temperature programmes	100
3.4.15. Importance of characteristics of a cleaning programme	103
3.4.16. Consumer opinion of cleaning programmes with long cycles.....	107

3.4.17.	Maximum time accept for an energy saving programme cycle during day- and night time.....	110
3.4.18.	Switch off and opening and unloading the appliance after the programme has ended	112
3.4.19.	Recognition of the energy programme and way of identification	115
3.4.20.	Expectations from a dishwasher with the highest energy efficiency class available	117
3.4.21.	Preferred hypothetical programme concerning temperature, energy consumption and programme duration	117
3.4.22.	Preferred programme options of ways to save energy and / or money	120
3.4.23.	Identification of all the types of information on the energy label of an automatic dishwasher	122
3.4.24.	Important information to be indicated on the future label by the participants	124
3.4.25.	Number of meals prepared and eaten per week	125
4.	Results for consumers without an automatic dishwasher.....	130
4.1.	Socio-demographic characteristics.....	130
4.1.1.	Reason for not having a dishwasher	131
4.1.2.	Frequency of manual dishwashing by week	136
4.1.4.1.	Implements used for washing dishes by hand	146
4.1.5.	Satisfaction with the cleaning result of washing dishes by hand	148
4.1.6.	Number of meals prepared and eaten per week	150
5.	Summary	155
6.	Annex.....	156
6.1.	Coding values	156
6.2.	Online Questionnaire	157
	Acknowledgement.....	175
	References.....	176
	List of figures	177
	List of tables.....	183